

B. Remarks:

Claims 1 and 2 have been amended to correct minor typographical errors and to further point out the subject matter of the claim. Claim 15 has been canceled. Claim 25 has been added, and is dependent upon claim 1. Support for new claim 25 may be found in the specification, for example, on page 14, lines 1-7, on page 7 line 20–page 8 line 3, and also in claim 2 as originally filed.

II. RESPONSE TO OFFICE ACTION

Following the above Amendment, Claims 1-14 and 16-25 are pending in the application. The Examiner has rejected claims 1-10 and claims 17-24 and has objected to claim 1. Claims 11-14 and 16 have previously been withdrawn. Applicant respectfully traverses the rejections and objection and offers that claims 1-10 and 17-25 are patentable in light of the following remarks. Accordingly, Applicant respectfully requests the Examiner to withdraw the pending rejections and objection.

A. The Claims Are Patentable Under 35 U.S.C. § 112, paragraph 2.

1. The term “nutshell” in claims 5-7 and 18 has a distinct meaning in the context of the supporting specification.

The Examiner has rejected claims 5-7 and 18 under 35 U.S.C. § 112, paragraph 2 as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention. The Examiner has requested explanation of “nutshell,” “nutshell classification,” and related terms with support from the specification.

The word “nutshell” is used consistently in the specification to describe a course summary made available to a student participating in an electronic course. For example, the specification notes that in one embodiment of a course presentation, “[t]he course content

overviews may include a *nutshell* description of the course content or a description of a substantive subject matter taught in the course.” Specification at page 8, lines 19-20 (emphasis added). This sentence notes one possible component that may be incorporated into an overview of an educational course’s content. At another point, the specification describes systems and methods in which an “analyzer 24 detects that a particular student has participated in a *nutshell* or subject matter summary to a greater extent than a benchmark level of nutshell participation.” Specification at page 14, lines 14-15 (emphasis added).

A “nutshell” is a noun meaning “something of small size, amount, or scope.” *Merriam-Webster’s Collegiate Dictionary, Tenth Edition*, 798 (1993). Idiomatically, the phrase “in a nutshell” means “in a very brief statement.” *Id.* Thus, a “nutshell” as used in the above examples from the specification would be understood as a brief or compact description or summary of a course’s content.

Applicant submits that with the context and definition provided by the specification and the dictionary reference for the term “nutshell,” claims 5-7 and 18 particularly point out and distinctly claim the subject matter. Accordingly, Applicant respectfully requests that the rejection under § 112 be withdrawn regarding claims 5-7 and 18.

2. The term “monitor” in claims 17 is clear in view of the specification.

The Examiner has inquired regarding the meaning of the term “monitor” as used in claim 17. The Examiner observed that some monitors are components that measure or keep track of a computer’s or other system’s operation. Such monitors receive information about the operation in the form of a video signal and then provide the information as a visual display.

In the context of the specification, however, monitors are components that measure or keep track of students’ performance. These monitors receive information about the students’

performance in the form of gathered data and then provide the information in the form of indications of one or more classifications of the performance. As noted in the application, a “monitor 22 classifies student performance into discrete classifications associated with corresponding activities related to an electronic course. . . . The monitor 22 monitors or measures observed student performance levels associated with students in an electronic course.” Specification at page 5, lines 3-9. Applicant submits that with the context and definition provided by the specification and the dictionary reference for the term “monitor,” claim 17 particularly points out and distinctly claims the subject matter. ✓

B. Independent Claims 1 and 17 are Patentable Under 35 U.S.C. § 102.

The Examiner has rejected independent claims 1 and 17 under 35 U.S.C. § 102(e) as being anticipated by Layng et. al (U.S. Patent No. 6,523,007) (“*Layng*”). Applicant offers that various limitations of these claims are not taught in or disclosed by *Layng*. Examples of some of the features absent in *Layng* are discussed below. Accordingly, Applicant respectfully requests that the rejection under § 102(e) be withdrawn regarding claims 1 and 17.

1. *Layng* does not teach or describe the use of feedback based on the “identity of the at least one performance classification of deficient student performance.” ✓

The Examiner noted that *Layng* discloses a system for teaching reading skills in which a child learning with the system can use a computer mouse to click on one of several proffered responses. *Layng* at column 11, lines 7-10. “A running total of ‘correct’ clicks for the child may be kept until the child reaches a threshold of correct clicks.” *Id.* at column 10, lines 46-48. The child’s responses are tracked, and the correct responses are tallied and compared to a threshold level. *Id.* at column 11, lines 7-10. “An audible prompt instructs the child to select/click the element ‘s’ or ‘ee’ as each row is displayed, and the number of correct clicks is tracked until the

child reaches a threshold number of correct clicks.” *Id.* Once the *Layng* system has ascertained that the student has achieved a particular performance criterion, the system provides positive feedback to the student and proceeds to a subsequent routine of the system. *Id.* at column 12, lines 1-10; *id.* at column 12, lines 59-61. The size, intensity, or duration of the positive feedback can be adjusted in some situations. *Id.* at column 12, lines 10-12.

However, *Layng* does not teach or disclose the selection or identification of a particular type of feedback based on the nature of the performance being measured. The feedback offered by *Layng* is a non-specific “reward animation.” *Id.* at Fig. 4, block 82; *id.* at column 12, lines 1-5. The reward animation does not depend on the type of activity being monitored in the *Layng* system. Thus, the *Layng* system does not teach discrimination between various performance classifications for selecting the feedback to be given.

In contrast, the method of amended claim 1 includes:

identifying an instructive feedback for the individual based upon . . . an identity of the at least one performance classification of deficient student performance.

Also, the system of claim 17 includes:

a feedback generator for identifying or determining an instructive feedback for the particular student based upon . . . an identity of the analyzed performance classification.

By way of example, the Specification discusses feedback that may be tailored to a student having difficulty in a particular type of activity. “For example, if the observed student performs deficiently in the number of clicks in the assignment classification, the feedback generator 26 generates a feedback message for provision to the particular student terminal 10 that advises the student to spend more time on the assignment(s).” Specification at page 14, lines 1-4. In contrast, a different type of feedback may be used for a different type of observation. Thus, “if the particular student does not perform up to the relevant benchmark performance level in the

problem classification, the feedback generator 26 may advise the student to spend more time solving the problems.” *Id.* at page 14, lines 4-7. In another example, the feedback may be tailored to provide customized instruction to a student who has difficulty with the material described in a particular nutshell summary for a portion of the course. Specification at page 14, line 12–page 15 line 7. “[T]he classification-by-classification feedback may assist the observed student in allocating his time appropriately in various aspects of the electronic course to achieve an enhanced learning process that would not be otherwise obtainable by traditional classroom techniques.” *Id.* at page 14, lines 7-10.

As noted above, *Layng* does not teach or disclose the identification of instructive feedback for the individual based upon the identity of a performance classification. Thus, these limitations of Claims 1 and 17 are not present in the cited reference.

2. *Layng* does not teach or describe the use of feedback based on “deficient student performance.”

Further, in the context of using benchmarks or thresholds, *Layng* does not teach the use of feedback for a student’s failure to reach a benchmark or threshold performance. *Layng* only describes the use of positive feedback. The *Layng* system uses only a “reward animation” after a threshold has been affirmatively met. *Id.*, *Layng* at Fig. 4 (step 82).

Indeed, the procedures presented in Figs. 2 -4 of *Layng* particularly avoids feedback for a student’s failure to reach a benchmark. Once the *Layng* system detects a student failure (starting with the right branch from step 58 of Fig. 3), the subsequent chain of steps (terminating with the resetting and looping in step 72 of Fig. 3) includes no feedback to the student. Rather, the procedure repeats until the student successfully completes the routine (step 80 in Fig. 4),

whereupon positive feedback is given to the student (Step. 82 of Fig. 4). Thus, *Layng* teaches away from providing feedback to students with deficient performance. ✓

As noted above, amended claim 1 is directed to a method of analyzing student performance in an electronic course, including a step of identifying instructive feedback for an individual based upon criteria related to “deficient student performance.” *Layng* does not teach or disclose the use of instructive feedback based upon a student’s failure or any other deficient performance. For this reason as well, *Layng* does not teach or describe all the limitations of claim 1. ✓

C. Dependent Claims 2-4, 8-10 and 18-24 are Patentable Under 35 U.S.C. § 102.

The Examiner has also rejected dependent claims 2-4, 8-10, and 18-24 under 35 U.S.C. § 102(e) as being anticipated by *Layng*. Claims 2-3 and 8-10 depend upon independent claim 1. Claim 4 depends in turn upon claim 3. Claims 18-19 and 21-24 depend upon independent claim 17. Claim 20 depends in turn upon claim 19. As discussed above, claims 1 and 17 are patentable under 35 U.S.C. § 102. Accordingly, dependent claims 2-4, 8-10 and 18-24 are also allowable for at least the same reasons as discussed above for independent claims 1 and 17, and Applicant respectfully requests that the rejection under § 102(e) be withdrawn regarding claims 2-4, 8-10 and 18-24.

D. New Dependent Claim 25.

Claim 25 has been added. As noted above, in the remarks to the Amendment, new claim 25 is dependent upon claim 1, and support for new claim 25 may be found in the specification, for example, on page 14, lines 1-7, on page 7 line 20–page 8 line 3, and also in claim 2 as originally filed.

E. Objected Claim

The Examiner has objected to informalities in claim 1. Claim 1 has been corrected accordingly in the above Amendment. Applicant respectfully requests the Examiner to withdraw the objection to claim 1.

F. Summary

Claims 1-10 and 17-25 are patentable. Applicant respectfully requests the Examiner to grant an early allowance of the application, and a notice of this allowance is requested. The Examiner is invited to contact the undersigned attorney for Applicant via telephone if the Examiner concludes that such communication would expedite allowance of this application.

Respectfully submitted,



Cyrus F. Bharucha
Registration No. 42,324
Attorney for Applicant

BRINKS HOFER GILSON & LIONE
P.O. Box 10395
Chicago, Illinois 60610
(312) 321-4200

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